## THE NORTH AMERICAN GENERA OF CALYPTRATE MUSCIDÆ. Paper 111.\*

BY C. H. TYLER TOWNSEND.

The following synopsis contains all the genera of the Dexiidae thus far recognized and described from America north of Panama, except some genera to which species have been wrongly referred, and which are, so far as possible, omitted. Notes on the latter will be found at the end of this paper.

A word may be offered upon the relations existing between the higher groups of Tachinidæ and Dexiidæ. The group Proseninæ occupies, in the Dexiidæ, the same position which the group Hystriciinæ does in the Tachinidæ. It includes robust forms, with the apical cell open and ending a little before the apex of the wing, agreeing in this respect with the above group of Tachinidæ. These forms further agree with each other, and differ from all the other genera in the Dexiidæ, in the character of the proboscis. The genera Hystrisiphona, Hystrichodexia and Bathydexia, approach Dejeania and its allies in the character of the spiny macrochetæ.

The present synoptic table is based upon the one given by Mr. van der Wulp for the Central American genera, in the "Biologia Centrali-Americana"

# Synoptic table of the North American genera of DEXIIDÆ.

<sup>\*</sup> Paper I was published in Proc. Ent. Soc. Washington, ii, pp. 89-100. Paper II, in Trans. Am. Ent. Soc. xix, pp. 133-144.

4. Sides of face bare  Sides of face clothed with short bristles	chops* B. B. b. t. F. and Serv. c; macrochætæ
5. Palpi very short, thickened at tip, macrochætæ only marginal  Prosena S Palpi moderately long, not at all or but little thickened at tip usually discal and marginal	t. F. and Serv. ; macrochætæ
Prosena S Palpi moderately long, not at all or but little thickened at tip usually discal and marginal	t. F. and Serv. ; macrochætæ
usually discal and marginal	6. Soma B. & B. aima B. & B
6. Claws of \$\( \xi\) extraordinarily long	Soma B. & B.  nima B. & B.
Claws of both sexes short	nima B. & B
7. Abdomen densely covered with spinose macrochætæ	
Abdomen with regularly arranged macrochete	lexia v. Röd. exia v. d. W.
	exia v. d. W.
8. Vibrissæ inserted some distance above oral margin.	exia v. d. W.
Vibrissæ inserted on oral margin	CARRY, G. W.
9. Eyes descending not more than two-thirds distance to the lar	taral aral man
gin	
Eyes descending at least three-fourths of the distance to the	he lateral oral
margin	
10. Fourth vein with a stump at its bend Scot	
Fourth vein without stump at bend	
11. Macrochætæ of abdomen discal and marginal Rhynch	
Macroehætæ of abdomen only marginal My	
12. Facial ridges parallel; antennæ inserted on a line drawn thro	
eyesTroni	
Facial ridges divergent toward oral margin; autennæ inser	
above a line drawn through middle of eyes <b>Stomatod</b> 13. Eyes descending less, or hardly more than two-thirds distance	
oral margin	
Eyes descending nearly or quite to oral margin, the cheeks cons	
narrow dorso-ventrally (Thelairing)	
14. Apical cell petiolate, or closed in margin (Melanophorina)	15.
Apieal eell open (Dexiinæ)	
15. Hind cross vein nearer to bend of fourth vein than to the sn	
or in the middle between the two; cheeks beset with short be	
Hind cross-vein nearer to small cross-vein than to bend of for	
16. Fourth vein with a stump at bend	
Fourth vein without stump at bend, cheeks as wide as diameter	er or eyes. aria v. d. W.
17. Sides of face narrow, naked	
Sides of face broad, elothed with bristles	tina v d W
18. Face distinctly carinate	19.
Face not carinate, or only faintly so	
19. Antennæ nearly as long as the face	rona v. d. W.
Antennæ much shorter than the face	
20. Abdomen wide and stout, short oval, first segment somewhat s	
Abdomen eonical or elongate oval	
21. Sides of face naked	
Sides of face bairy	
* Nothing is said of the character of the proboscis in the desc	
genus, but from its close relationship with Hystrisiphona, as indica	ted by Br. and
v. Bgst., I infer that it belongs to this group.	

22. Antennæ inserted on a line drawn through middle of eyes
Antennæ inserted on or below such line,24.
23. Arista short-haired; hind cross-vein half way between small cross-vein and
bend of fourth vein
Arista distinctly plumose; hind cross-vein nearer to bend of fourth vein than
to small cross-vein
24. Eyes small, less in diameter than width of cheeks
Eyes of usual size, of greater diameter than width of cheeks
25. Fourth vein with a stump at bend
26. Costa of wings bristly, or at least with a costal spine
Costa of wings without bristles, or costal spine; hind cross-vein nearer to
bend of fourth than to small cross-vein
27. Abdomen elongate, nearly cylindrical, twice as long as thorax; segments of
equal length
Abdomen short, stout, first segment somewhat shortened
28. Sides of face hairy; claws of & elongatePtilodexia B. & B.
Sides of face naked; claws of both sexes alike, usually short.
Sardioeera B. & B.
29. Abdomen conical or elongate-oval30.
Abdomen cylindrical or elongate-conical, much longer than the thorax31.
30. Middle legs of & disproportionately long
Middle legs but little, if at all, longer than the othersMelalenca v. d. W.
31. Apical cell widely open; wings unicolorous
Apical cell narrowly open; wings unicolorous, nearly hyaline32.
32. Eyes bare; anal segment shorter than preceding one Leptoda v. d. W.
Eyes pilose; anal segment very elongate in §
33. Abdomen cylindrical, very elongate and strikingly attenuated at the base.
Cordyligaster Mcq. Abdomen oval, conical, or subcylindrical, never petiolate34.
34. Frontal bristles descending below base of antenna
Frontal bristles never descending lower than base of antenna
35. Antennæ inserted above a line drawn through middle of the eyes.
Chartona v. d. W.
Antennæ inserted on or below a line drawn through the middle of the eyes.
Sarcodexia Towns
36. Third vein with a row of bristles
Third vein without bristles, except at base
37. Third antennal joint at least four times as long as second.
Thelairodes v. d. W.
Third joint about twice as long as second
38. Abdomen yellow, with or without black markings
Abdomen black, sometimes partly whitish or cinereous
39. Apical cell broadly open
Apical cell narrowly open
40. Curvature of fourth vein arcuate
Curvature of fourth vein angular
41. Arista short-hairy
42. Eyes bare
Eyes pilose
TRANS, AM, ENT. SOC. XIX. DECEMBER, 1892.

#### NOTES.

- Illigeria Rob. Dsv. Myod. 273.—This is apparently the same as the genus Melanophora. The differences given by R. D. are totally insufficient. The three North American species referred to this genus by Walker belong, as O. S. observes (Cat. Dipt. N. A. 156), to entirely different genera.
- Theresia R. D. Myod. 325.—The characterization is too scanty to include this genus in the synopsis. Nothing is said of the venation, proboseis, etc. It is said to be distinguished from *Phorostoma* by the antennee being longer and reaching to the epistoma, but there is no assurance that it agrees with it in other characters. Br. Bgst. (Musc. Sch. i, 51) indicate its affinity with *Ptilodexia*.
- Homodexia Big. Bull. Soc. Ent. Fr. 1885, xxvi.—Mr. v. d. Wulp has shown (Biol. C.-A. Dipt. ii, 263-4) that this genus is untenable, since it includes forms which must be referred to various different genera.
- Anthracomyia Rdi.—The same author points out (Biol. C.-A. D. ii, 264) that Bigot's species referred here is misplaced. It should perhaps be referred to *Calodevia* v. d. W.
- Rhamphinina Big. Bull. Soc. Ent. Fr. 1885, xi.—Shown by v. d. Wulp (Biol. C.-A. Dipt. ii, 225) to be insufficiently separated from *Rhynchodexia* Big., of which it must be considered a synonym.
- Siphoniomyia Big. Bull. Soc. Ent. Fr. 1885, xii.—The single Mexican species for which Bigot erected this genus is stated by v. d. Wulp to belong to the Tachinid genus *Trichophora* (Biol. C.-A. Dipt. ii, 225).
- Oplisa Rdi.—Mr. Bigot has referred two Mexican species to this genus. Both belong to different genera. O. albifacies Big. may be referred to the Tachinid genus Anisia v. d. W.; and O. nigvifacies Big. is the same as Degeria longipes v. d. W., which must be known as D. nigrifacies Big., the latter name having priority (see v. d. W., Biol. C.-A. Dipt. ii, 264).
- Pyrrhosia Rdi.—This genus is indicated by Br. & Bgst. (Musc. Schiz. i, 67) as equivalent to Leskia R. D. and Myobia R. D., Sch., both of which belong to the Tachinidæ. The single Mexican species which Bigot refers here could never be recognized or placed from the two-line description of its author. Mr. v.

- d. Wulp states (Biol. C.-A. Dipt. ii, 264) that the type, examined by him, bears a striking resemblance to the Q of *Phasiopteryx bilimeki* B. & B.
- Megerlea R. D. Rdi.—A single species from the Rocky Mountains is referred here by Bigot, on the strength of which the genus is included.
- Morphomyia Rdi.—Included on a species from California referred here by Bigot.
- Sericocera Mcq. Hist. Nat. ii, 165; Dipt. Exot. ii, 3, 67, pl. vii, fig. 5.
  —This genus has been divided by Schiner into two Tachinid and three Dexiid genera. The latter are Mintho, Thelaira and Melanio. As nearly as can be judged from the figure and description, S. pietipennis Mcq. belongs to Thelaira, which is included on this supposition. But the figure shows a short stump at bend of fourth vein, and the macrochætæ are only marginal. It is quite distinct from Thelairodes v. d. W., and very probably does not belong to Thelaira.
- Phorostoma R. D., Sch.—Included on authority of Bigot, who refers two species to this genus.
- Myostoma R. D. Myod. 327.—This genus is insufficiently distinguished from *Phorostoma* R. D. Bigot has referred one species here.

#### References to Descriptions of Genera.

Hystrisiphona Bigot, Revue et Mag. Zool. 1859, p. 309 (1859); v. d. W., Biol. C.-A. Dipt. ii, 214.

Prorhynchops Brauer and v. Berg., Musc. Schiz. ii, 60, [364,] (1891).

Prosena St. Farg. and Serv., Enc. Méth. x, 500 (1825); Sch., Dipt. Austr. i, 557.

Mochlosoma Br. and Bgst. Muse. Schiz. i, 58, [126,] (1889).

Myiomima Br. Bgst. Musc. Schiz. i, 51, [119,] (1889).

Hystrichodexia v. Röder, Stett. Ent. Zeit. 1886, 266 (1886); v. d. W., Biol. C.-A. Dipt. ii, 218.

Bathydexia v. d. Wulp, Biol. C.-A. Dipt. ii, 222 (1891).

Scotiptera Macquart, Dipt. Ex. ii, 3, 83 (1843); v. d. W., Biol, C.-A. Dipt. ii, 223. Myocera Rob. Desv. Myod. 328 (1830); v. d. W., Biol, C.-A. Dipt. ii, 236.

Tromodesia Rondani, Dipt. Ital. Pr. i, 87 (1856); l. c. v. 144 (1862); v. d. W., Biol. C.-A. Dipt. ii, 237.

Stomatodexia Br. Bgst., Muse. Schiz. i, 57, [125.] (1889); v. d. W., Biol. C.-A. Dipt. ii, 238.

Megerlea Rob. Desv. Myod. 266 (1830).

Megaparia v. d. W., Biol. C.-A. Dipt. ii, 240 (4891).

Melanophora Meigen, Illiger's Mag. ii, 279 (1803): Sch., Dipt. Austr. i, 552.

Microchætina v. d. W., Biol. C.-A. Dipt. ii, 240 (1891).

Camarona v. d. W., Biol. C.-A. Dipt. ii, 241 (1891).

Dexia Meig., s. str. Syst. Beschr. Europ. Zweifl. Ins. v, 33 (1826); v. d. W., Biol. C.-A. Dipt. ii, 242.

Phorostoma Rob. Desv. Myod. 326 (1830); Sch., Dipt. Austr. i, 561.

Morphomyia Rdi., Dipt. Ital. Pr. i, 82 (1856).

Acronacantha v. d. W., Biol. C.-A. Dipt. ii, 243 (1891).

Dexiosoma Rdi., Dipt. Ital. Prod. i, 85 (1856); v. d. W., Biol. C.-A. Dipt. ii, 244

Microphthalma Macq., Dipt. Ex. ii, 3, 84 (1843); Sch., Dipt. Austr. i, 565.

Macrometopa Br. Bgst. Musc. Schiz. i, 49, [117,] (1889); v. d. W., Biol. C.-A.

Dipt. ii, 245.

Stenodexia v. d. W., Biol. C.-A. Dipt. ii, 246 (1891).

Ptilodexia Br. Bgst. Musc. Schiz. i, 51, [119,] (1889).

Sardiocera Br. Bgst. Musc. Schiz. i, 51, [119,] (1889).

Cholomyia Bigot, Bull. Soc. Ent. Fr. 1884, p. xxxvii (1884); v. d. W., Biol. C.-A. Dipt. ii, 246.

Melaleuca v. d. W., Biol. C.-A. Dipt. ii, 247 (1891).

Euantha v. d. W., Tijdschr. voor Entom. xxviii, 198 (1885); Biol. C.-A. Dipt. ii, 248.

Leptoda v. d. W., Tijdschr. voor Ent. xxviii, 196 (1885); Biol. C.-A. Dipt. ii, 250.

Uramyia Rob. Desv. Myod. 215 (1830); v. d. W., Biol. C.-A. Dipt. ii, 251.

Cordyligaster Macq., Dipt. Ex. ii, 3, 90 (1843); v. d. W., C.-A. Dipt. ii, 252.

Chætona v. d. W., Biol. C.-A. Dipt. ii, 253 (1891).

Sarcodexia Townsend, Jour. Inst. Jamaica, i, 105 (1892).

Thelairodes v. d. W., Biol. C.-A. Dipt. ii, 254 (1891).

Thelaira Rob. Desv. Myod. 214 (1830); Sch., Dipt. Austr. i, 454.

Xanthodexia v. d. W., Biol. C.-A. Dipt. ii, 256 (1891).

Calodexia v. d. W., Biol. C.-A. Dipt. ii, 257 (1891).

Rhombothyria v. d. W., Biol. C.-A. Dipt. ii, 259 (1891).

Pseudomorinia v. d. W., Biol. C.-A. Dipt. ii, 259 (1891).

Morinia Rob. Desv. Myod. 264 (1830); Sch., Dipt. Austr. i, 550; v. d. W., Biol. C.-A. Dipt. ii, 260.

Comyops v. d. W., Biol. C.-A. Dipt. ii, 262 (1891).

### Synonymy.

? Sophia R. D. pt. Myod, 317, = Scotiptera (v. d. W.).

Rhamphinina Big., Bull. Soc. Ent. Fr. 1885, p. xi, = Rhynchodexia (v. d. W.).

Oxydexia Big., Bull. Soc. Ent. Fr. 1885, p. xxxiii, = Uramyia (v. d. W.).

Illigeria R. D. Myod. 273, = Melanophora (see note).

Siphoniomyia Big., Bull. Soc. Ent. Fr. 1885, xii, = Trichophora (Tachinid genus). (v. d. W.).